



# Asia Goes Shopping: Do Transportation and Infrastructure Matter?

USDA Agricultural Outlook Forum 2003  
*Crystal Gateway Marriott Hotel*  
*Arlington, Virginia*

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*William Coyle*  
*ERS, USDA*

# Outline

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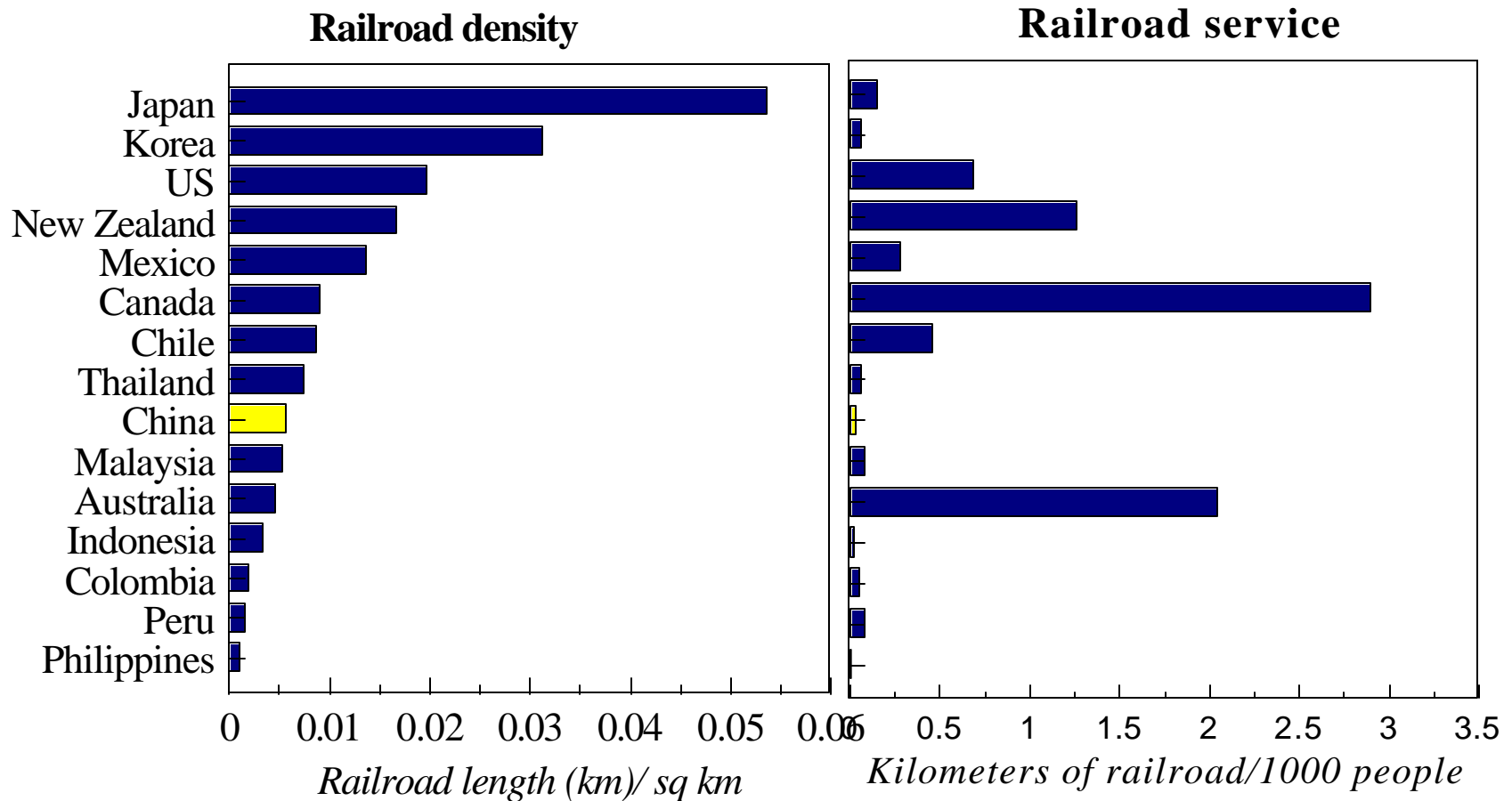
Current status of infrastructure  
and transportation in Asia

Impact on food system

Outlook



# Railroad Density and Service

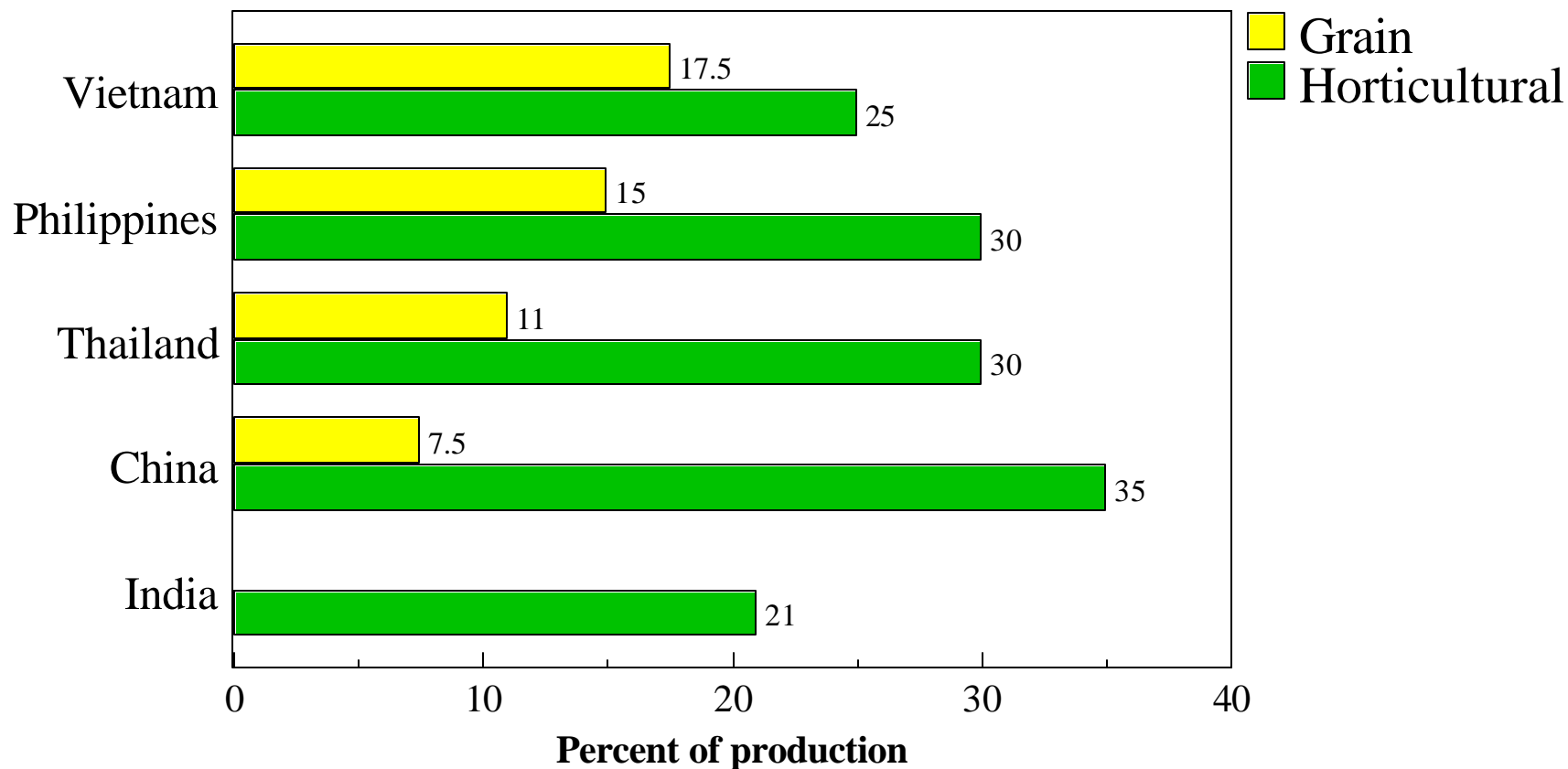


Note: Most data are for 1993;  
population numbers are for 1996.

Source: David Canning, A Database of World Infrastructure  
Stocks, 1950-95, World Bank

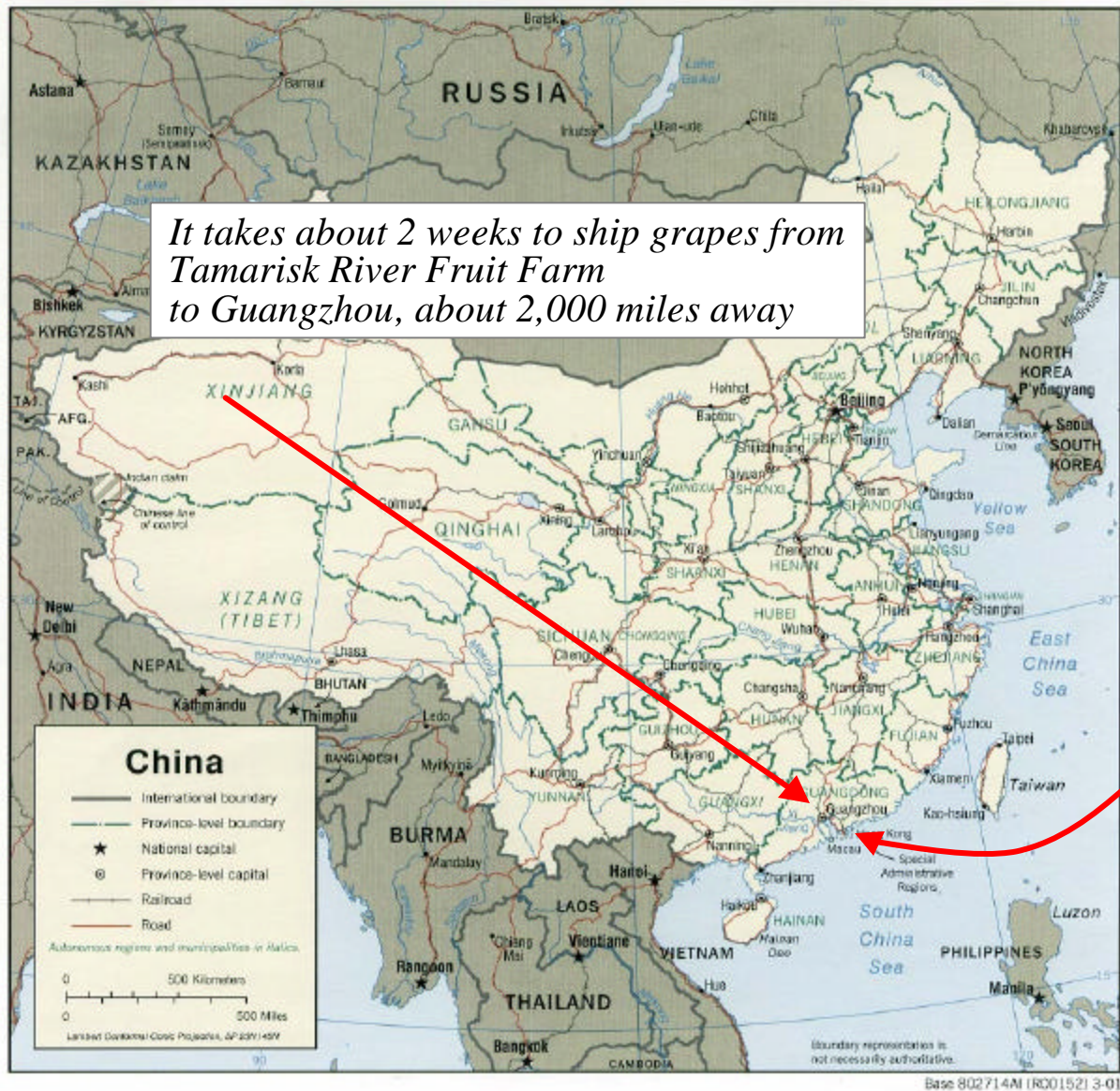
# Post Harvest Losses, Selected Asian Countries

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Source: The 5th JIRCAS International Symposium,  
Postharvest Technology in Asia--A Step Forward to Stable  
Supply of Food Products, Tsukuba, Ibaraki, Japan, Sept. 9-10, 1998





*It takes about the same time to ship California grapes to Guangzhou, more than 3X the distance, about 7,500 miles*

Source: Washington Post, Nov. 11, 2001

# Some Important Asian Infrastructure Projects

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Hong Kong--Shenzen--Pearl River Delta

Yantian, Chiwan, and Shekou

China's \$42 billion in 7,000 additional kilometers of new track by 2005; east-west links connecting natural resources in west with manufacturing capacity in east.

East-west high speed railway linking Shanghai with cities of southwestern Sichuan (reducing transit time from 41 to 24 hours); in planning

Beijing-Shanghai high speed link (from 14 to 5 hours); underway in 2005

Beijing-Guangzhou (from 24 to 14 hours); in planning

New rail link connecting three southern Chinese provinces with Southeast Asia; completed

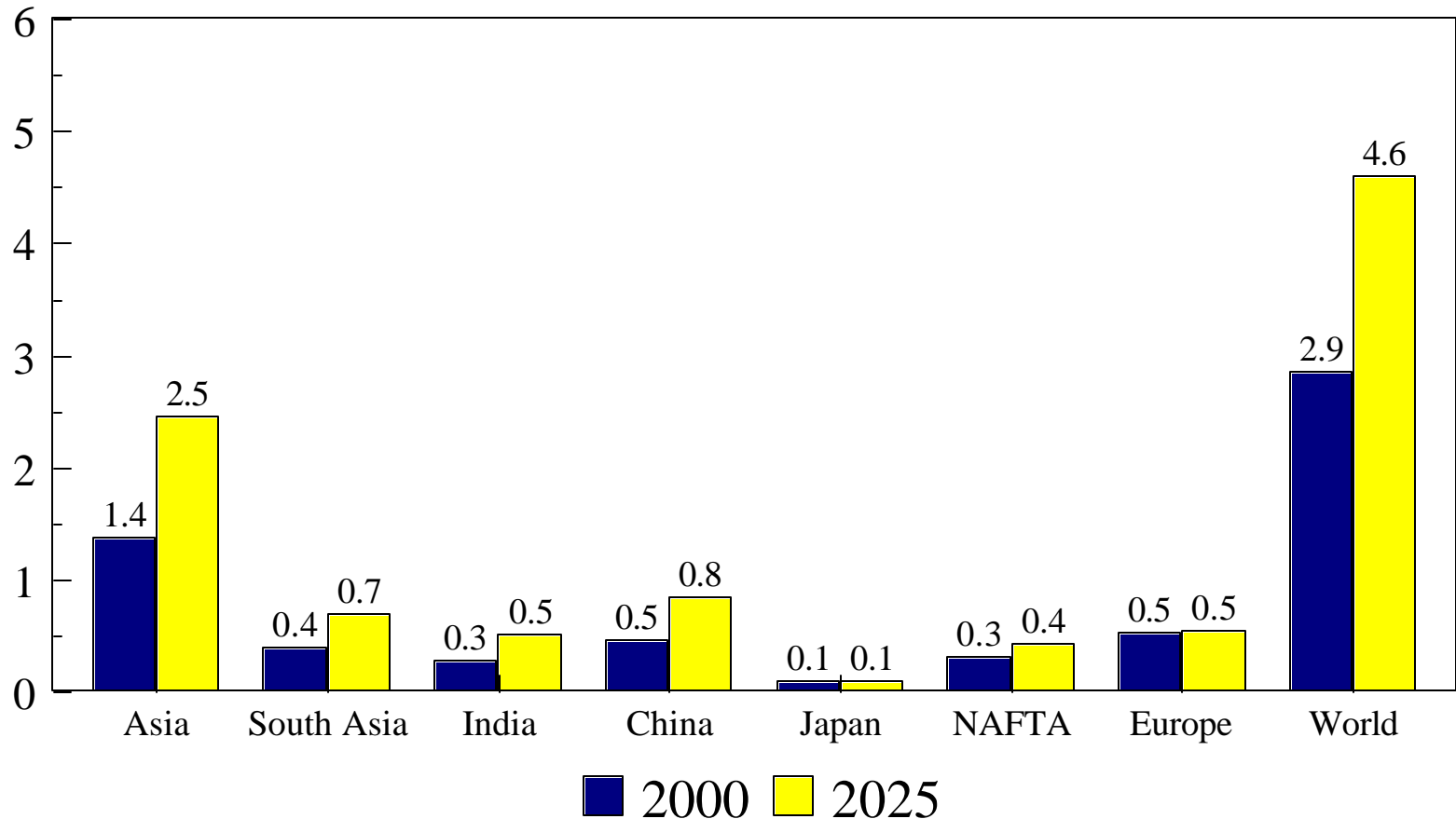
India's 10-year \$12 billion National Highway Development Plan--linking major cities, ports and regions, 8,000 miles, completed by 2009 (will cut travel time by more than 50 percent); funding sources: The World Bank, fuel tax, and other institutions.

# Urban Population in Asia

## Projected to Nearly Double by 2025

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**Billion people**





# More than Half of Megacities in 2015 Will Be in Asia

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<i>City</i>	<i>Population (million)</i>	<i>Asia</i>	<i>Coastal</i>
Tokyo	26.4	X	X
Mumbai (Bombay)	26.1	X	X
Lagos	23.2		X
Dhaka	21.1	X	X
Sao Paulo	20.4		
Karachi	19.2	X	X
Mexico City	19.2		
New York	17.4		X
Jakarta	17.3	X	X
Calcutta	17.3	X	X
Delhi	16.4	X	
Metro Manila	14.8	X	X
Shanghai	14.6	X	X
Los Angeles	14.1		X
Buenos Aires	14.1		X
Cairo	13.8		
Istanbul	12.5		X
Beijing	12.3	X	X
Rio de Janeiro	11.9		X
Osaka	11.0	X	X
Tianjin	10.7	X	X
Hyderabad	10.5	X	
Bangkok	10.1	X	X

# Wrap up

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Better infrastructure and transportation systems do matter:

- Crucial to the economic development and growth of Asia;
- Enhance food system, allowing for more efficient marketing of food products, both domestic and imported;
  - Allow rural populations to benefit from market opportunities, adjust to international competition, and reap the benefits of trade expansion and market globalization; and
  - Mitigate environmental and social problems from intense urbanization.